

10583717\_CLSTI TLES.txt  
Titles of most frequently occurring classifications of patents returned  
from a search of 10583717 on Mar 25, 2009

14 704/ 226 (7 OR, 7 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SIGNAL PROCESSING, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ 200 . SPEECH SI GNAL PROCESSI NG  
704/ 201 .. For storage or transmission  
704/ 226 ... Noise

9 704/ 233 (4 OR, 5 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ 200 . SPEECH SI GNAL PRCESSI NG  
704/ 231 .. Recognition  
704/ 233 ... Detect speech in noise

8 704/ 219 (1 OR, 7 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ 200 . SPEECH SI GNAL PROCESSI NG  
704/ 201 .. For storage or transmission  
704/ 219 ... Li near prediction

7 704/ 221 (4 OR, 3 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ 200 . SPEECH SI GNAL PROCESSI NG  
704/ 201 .. For storage or transmission  
704/ 221 ... Pattern matching in vocoders

6 704/ E19. 006 (0 OR, 6 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR  
REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O  
SI GNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE- FILTER  
MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)  
704/ E19. 006 .. Comfort noise, silence coding (EPO)

6 704/ E21. 004 (0 OR, 6 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ E21. 001 . MODIFICATION OF AT LEAST ONE CHARACTERISTIC OF SPEECH WAVES  
(EPO)  
704/ E21. 002 .. Speech enhancement, e. g., noise reduction, echo  
cancel lation, etc. (EPO)  
704/ E21. 003 ... Applications (EPO)  
704/ E21. 004 .... Speech corrupted by noise (EPO)

5 704/ 229 (0 OR, 5 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ 200 . SPEECH SI GNAL PROCESSI NG  
704/ 201 .. For storage or transmission  
704/ 229 ... Adaptive bit allocation

5 704/ E19. 041 (0 OR, 5 XR)  
Cl ass 704 DATA PROCESSING; SPEECH SI GNAL PROCESSI NG, LANGUI STI CS,  
LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR  
REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O

10583717.CLS TI TLES.txt

SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE-FI LTER MODELS, PSYCHOACOUSTI C ANALYSIS, ETC. (EPO)

704/ E19. 023 . . . Usi ng predictive techni ques; codecs based on sour ce-filter

model i zati on ( EPO )

704/ E19. 039 . . . Det ai ls of speech and audi o coders (EPO)

704/ E19. 04 . . . Vocoder ar chi tecture (EPO)

704/ E19. 041 . . . Vcoders usi ng multi ple modes (EPO)

5 381/ 94. 3 ( 4 OR, 1 XR)

Cl ass 381 ELECTRI CAL AUDI O SI GNAL PROCESSI NG SYSTEMS AND DEVI CES

381/ 94. 1 . . . NOISE OR DISTORTI ON SUPPRESSI ON

381/ 94. 2 . . . Spectral adj ustment

381/ 94. 3 . . . In multi ple frequency bands

4 455/ 570 ( 2 OR, 2 XR)

Cl ass 455 TELECOMMUNI CATI ONS

455/ 73 . . . TRANSMITTER AND RECEI VER AT SAME STATION (E. G.,

TRANSCEI VER)

455/ 550. 1 . . . Radi o telephone equipment detail

455/ 569. 1 . . . Hands-free or loudspeaking arrangement

455/ 570 . . . Noise suppression or echo cancellati on

3 704/ E19. 035 ( 0 OR, 3 XR)

Cl ass 704 DATA PROCESSI NG; SPEECH SI GNAL PROCESSI NG, LI NGUI STI CS,

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/DECOMPRESSI ON

704/ E19. 001 . . . SPEECH OR AUDI O SI GNAL ANALYSIS; SYNTHESI S TECHNI QUES FOR REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE-FI LTER MODELS, PSYCHOACOUSTI C ANALYSIS, ETC. (EPO)

704/ E19. 023 . . . Usi ng predictive techni ques; codecs based on sour ce-filter

model i zati on ( EPO )

704/ E19. 026 . . . Determinati on or coding of the excitation function; determinati on or coding of the long-term prediction characteristics (EPO)

704/ E19. 035 . . . Determinati on or coding of a code excitation; code excited linear prediction (CELP) vocoders (EPO)

3 379/ 386 ( 1 OR, 2 XR)

Cl ass 379 TELEPHONI C COMMUNI CATI ONS

379/ 350 . . . SUPERVI SORY OR CONTROL LI NE SI GNALI NG

379/ 386 . . . Si gnal recei ver (e. g., tone decoder)

3 379/ 283 ( 0 OR, 3 XR)

Cl ass 379 TELEPHONI C COMMUNI CATI ONS

379/ 242 . . . CENTRALIZED SWITCHING SYSTEM

379/ 258 . . . Swit ching controlled in response to called station

addressi ng si gnal

379/ 268 . . . Having shared or common swit ching control

379/ 280 . . . Includi ng registering or storing device for call address

si gnal

379/ 282 . . . Voic e frequency recei ver

379/ 283 . . . Dual tone multi frequency (DTMF) recei ver

3 379/ 406. 08 ( 3 OR, 0 XR)

Cl ass 379 TELEPHONI C COMMUNI CATI ONS

379/ 406. 01 . . . ECHO CANCELLATI ON OR SUPPRESSI ON

379/ 406. 06 . . . Usi ng digital si gnal processi ng

379/ 406. 08 . . . Adaptive filtering

3 370/ 290 ( 0 OR, 3 XR)

Cl ass 370 MULTIPLEX COMMUNI CATI ONS

370/ 276 . . . DUPLEX

370/ 282 . . . Transmi t/recei ve interaction control

370/ 286 . . . Echo suppression or cancellati on

3 704/ 214 (1 OR, 2 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ 200 . SPEECH SI GNAL PROCESSI NG  
 704/ 201 .. For storage or transm ission  
 704/ 211 ... Ti me  
 704/ 214 .... Voiced or unvoiced

3 704/ 224 (0 OR, 3 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ 200 . SPEECH SI GNAL PROCESSI NG  
 704/ 201 .. For storage or transm ission  
 704/ 224 ... Normalizing

3 704/ E19. 043 (0 OR, 3 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE- FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)  
 704/ E19. 023 .. Usi ng predictive techni ques; codecs based on source-filter

model i zati on (EPO)

704/ E19. 039

.... Det ails of speech and audi o coders (EPO)

704/ E19. 04

.... Vocoder architecture (EPO)

704/ E19. 041

.... Vcoders usi ng multi ple modes (EPO)

704/ E19. 043

.... Mode deci sion, i. e., based on audi o si gnal content

ver sus ext er nal parameter (EPO)

3 704/ E19. 044 (0 OR, 3 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE- FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)  
 704/ E19. 023 .. Usi ng predictive techni ques; codecs based on source-filter

model i zati on (EPO)

704/ E19. 039

.... Det ails of speech and audi o coders (EPO)

704/ E19. 04

.... Vocoder architecture (EPO)

704/ E19. 041

.... Vcoders usi ng multi ple modes (EPO)

704/ E19. 044

.... Variab le rate or variab le quality codecs, e.g.,

scal abl e representati on encoding, etc. (EPO)

3 704/ E19. 003 (0 OR, 3 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR REDUNDANCY REDUCTI ON, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR AUDI O SI GNALS, E. G., SOURCE- FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)  
 704/ E19. 003 .. Correction of errors induced by the transm ission channel, if related to the codi ng (EPO)

3 704/ 200. 1 (2 OR, 1 XR)

Cl ass 704

LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON  
 704/ 200 . SPEECH SI GNAL PROCESSI NG  
 704/ 200. 1 .. Psychoacoustic

3 704/ E15. 039 (0 OR, 3 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ E15. 001 . SPEECH RECOGNITION (EPO)  
 704/ E15. 039 .. Speech recognition techniques for robustness in adverse environments, e.g., in noise, of stress induced speech, etc. (EPO)

3 704/ 225 (0 OR, 3 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 225 ... Gain control

2 704/ 201 (0 OR, 2 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission

2 704/ 222 (0 OR, 2 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 221 ... Pattern matching vocoders  
 704/ 222 .... Vector quantization

2 704/ 223 (2 OR, 0 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 221 ... Pattern matching vocoders  
 704/ 223 .... Excitation patterns

2 379/ 388. 04 (0 OR, 2 XR)  
 Class 379 TELEPHONIC COMMUNICATIONS  
 379/ 387. 01 . SUBSTITUTION OR TERMINAL CIRCUIT TRY  
 379/ 388. 01 .. For loudspeaking terminal  
 379/ 388. 04 ... Voice control of transmission direction

2 704/ E21. 001 (0 OR, 2 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ E21. 001 . MODIFICATION OF AT LEAST ONE CHARACTERISTIC OF SPEECH WAVES (EPO)

2 381/ 320 (1 OR, 1 XR)  
 Class 381 ELECTRICAL AUDIOSIGNAL PROCESSING SYSTEMS AND DEVICES  
 381/ 312 . HEARING AIDS, ELECTRICAL  
 381/ 320 .. Spectral control

2 704/ 227 (0 OR, 2 XR)  
 Class 704 DATA PROCESSING, SPEECH SIGNAL PROCESSING, LANGUAGE TRANSLATION, AND AUDIO COMPRESSON/ DECOMPRESSON  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 226 ... Noise  
 704/ 227 .... Pretension